

A
PROJECT REPORT
On
**LOGIN AND SIGNUP FORM WITH EMAIL
VERIFICATION**

Submitted in partial fulfillment of the requirements for the award of the

**DIPLOMA
IN
COMPUTER ENGINEERING**

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CERTIFICATE

Certified that this is a bonafide record of project work title

LOGIN AND SIGNUP FORM USING EMAIL VERIFICATION

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For partial fulfillment of the academic requirements for the award of Diploma in a Computer Engineering to the **Indur Institute of Engineering and Technology, Ponnala (V), Siddipet (Dist), Telangana** affiliated to State Board of Technical Education & Training was carried out by them under the guidance and supervision.

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DECLARATION

We hereby declare that the entire project work embodied in this dissertation entitled **“LOGIN AND SIGNUP FORM WITH EMAIL VERIFICATION”** has been independently carried out by our knowledge and no part of this work has been submitted for any degree/diploma in any institution or university previously.

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LOGIN AND SIGNUP FORM WITH EMAIL VERIFICATION

ABSTRACT

Login & Signup form with email verification using HTML, CSS, JavaScript Makes the webpage look satisfied whenever a user or a customer experiences.

And PHP Makes the web page to work efficiently when a user/customer tries to login or Signup with that web page. It is a scenario where a user/customer tends to register or signup with particular organization/company/institute.

In order to maintain security we are going to verify user registered email by sending an OTP to that particular Mail ID And only if a user is verified then only He /She can be able to login to the system/website.

Here HTML is used to create the skeleton of the web page like the input fields and submit button layout. And CSS is used to add colourings and design to the HTML Page which ultimately results in the beautiful appearance of the web page.

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CHAPTER-1

INTRODUCTION

1.1 Project Overview

This project provides user to create a account in website to access Logging in is usually used to enter a specific page, website or application, which trespassers cannot see. Once the user is logged in, the login token may be used to track what actions the user has taken while connected to the site.

Logging in is usually used to enter a specific page, website or application, which trespassers cannot see. Once the user is logged in, the login token may be used to track what actions the user has taken while connected to the site. Logging out may be performed explicitly by the user taking some actions, such as entering the appropriate command or clicking a website link label as such. It can also be done implicitly, such as by the user powering off his or her workstation, closing a web browser window, leaving a website, or not refreshing a website within a defined period.

Signup forms are an easy but powerful way to extend the reach of your email marketing and enhance your long-term audience growth. Mailchimp offers a number of options to attract subscribers on your website, social channels, and other platforms.

1.2 Objective

This software is highly programmed in PHP,HTML,CSS and SQL technology in order to provide the best services to users and d only if a user is verified then only He/She can be able to login to the system/website.

This software is designed in Visual studio editor with SQL Server as backend. All the data will be stored in the server and in case of any data losing situation, a backup will be available by this server. The software is being designed to access website or system of verified users only. This software provides account to user to access . User will set password to login in her/his

1.3. Existing System

In the existing system, all the records are not kept perfectly because all the work is done manually. Thus, the existing system is very time consuming and being manual work sometimes lead to a great loss as well.

Disadvantages of existing system

- Takes bit longer time to send OTP to the registered user.

- Email verification only works for “@gmail.com” domain mail ID.
- User can't create multiple accounts on single mail.

1.4. Proposed system

The propose system is highly automated and makes the user access the website or system much easier and flexible. The user can get the very right way to access.

Advantages of proposed system

- User's info is secured with different encryption functions which are provided by default in PHP Version.
- Forget password is Also Available.
- Verified users will access the website or system.

CHAPTER_2

SOFTWARE REQUIREMENT SPECIFICATION

2.1 Introduction

Login & Signup form with email verification which is widely used now a days in almost all the websites in order to authenticate the user while He / She is registering or Logging in. Truly, login or signup forms are one of the most important elements that a web page contains and hence designing these online forms is one of the most significant features when it comes to designing the website. Online Signup and registration forms, HTML Login Form Templates are important aspects of almost every web design. If your website needs active contribution from the visitors, then you should have provisions so that they can register or signup to open an account with your site.

What is Login and Signup Form

Both the terminologies are used in the same context but for different purposes. Login identifies you as a returning user whereas sign up describes you as a new user. Login means you are already registered and your name is on the list. Your credentials are already saved with the account and you are just authenticating yourself as a returning user.

“Log on” and “Register” is the original terminology that goes way back to the good old mainframe days. With the advent of personal computers and evolution of Internet, and with all the social media hype, the terms have become more popular than ever.

The common terms being used today are “log in” and “sign up” which are interchangeable with “sign in” and “signup”. You can see both sign up and signup are synonymous and different websites use them differently.

Similarly, sign in and log in are synonymous with each other and are used basically for the same purpose – that is to authenticate yourself to an account that is already created by you. Sign up simply refers to the process of registering yourself to create an account. They both are all over the internet and the difference is quite subtle.

In this article, we've expanded the registration process to include an email based account activation procedure. The account activation logic requires sending a verification token to the user via email so that they can send it back to the controller to verify their identity.

2.1.1 Requirement Specification

These prerequisites are known as (computer) system requirements and are often used as a guideline as opposed to an absolute rule. Most software defines two sets of system requirements: minimum and recommended. The minimum system requirements need to be met for the software to run at all on your system, and the recommended system requirements, if met, will offer better software usability.

Developers Responsibilities Overview

The developer is responsible for:

1. Developing the system which meets the SRS and solving all the requirements of the system.
2. Demonstrating the system and installing the system at client's location after the acceptance testing is successful.
3. Submitting the required user manual describing the system interfaces to work on it and also the documents of the system.
4. Conducting any user training that might be needed for using the system.
5. Maintaining the system for a period of one year after installation.

2.1.2 Functional Requirements

2.1.2.1 Output Design

Outputs from computer systems are required primarily to communicate the results of processing to users. They are also used to provide a permanent copy of the results for later consultation. The various types of outputs in general are:

- External Outputs, whose destination is outside the organization,
- Internal Outputs whose destination is within organization and they are the user's main interface with the computer.
- Operational outputs whose use is purely within the computer department.

Output Definition

The outputs should be defined in terms of the following points:

- Type of the output
- Location of the output
- Frequency of the output

Output Media

In the next stage it is to be decided that which medium is the most appropriate for the output. The main considerations when deciding about the output media are:

- The suitability for the device to the particular application.
- The need for a hard copy.
- The response time required.
- The location of the users
- The software and hardware available.
- The cost.

Keeping in view the above description the project is to have outputs mainly coming under the category of internal outputs. The main outputs desired according to the requirement specification are:

The outputs were needed to be generated as a hard copy and as well as queries to be viewed on the screen. Keeping in view these outputs, the format for the output is taken from the outputs, which are currently being obtained after manual processing. The standard printer is to be used as output media for hard copies.

2.1.2.2 Input Design

Input design is a part of overall system design. The main objective during the input design is as given below:

- To produce a cost-effective method of input.
- To achieve the highest possible level of accuracy.
- To ensure that the input is acceptable and understood by the user.

Input Stages

The main input stages can be listed as below:

- Data recording
- Data control
- Data validation

Input Types

It is necessary to determine the various types of inputs. Inputs can be categorized as follows

- External inputs, which are prime inputs for the system.
- Internal inputs, which are user communications with the system.
- Operational, these are computer department's communications to the system.

Input Media

At this stage choice has to be made about the input media. To conclude about the input media consideration has to be given to;

- Type of input
- Accuracy
- Rejection rates
- Ease of correction
- Storage and handling requirements
- Security
- Easy to use
- Portability

Keeping in view the above description of the input types and input media, it can be said that most of the inputs are of the form of internal and interactive. As input data is to be directly keyed in by the user, the keyboard and mouse can be considered to be the most suitable input devices.

Error Avoidance

At this stage care is to be taken to ensure that input data remains accurate from the stage at which it is recorded up to the stage in which the data is accepted by the system. This can be achieved only by means of careful control each time the data is handled.

Error Detection

Even though every effort is made to avoid the occurrence of errors, still a small proportion of errors are always likely to occur, these types of errors can be discovered by using validations to check the input data.

Data Validation

Procedures are designed to detect errors in data at a lower level of detail. Data validations have been included in the system in almost every area where there is a possibility for the user to commit errors. The system will not accept invalid data. Whenever an invalid data is keyed in, the system will accept the data only if the data is correct. Validations have been included where necessary. The system has been designed with menus as user friendly.

User Interface Design

It is essential to consult the system users and discuss their needs while designing the user interface:

User Interface Systems can be broadly classified as

1. User initiated interface: In the user initiated interface the user is in charge, controlling the progress of the user/computer dialogue. In the computer-initiated interface, the computer selects the next stage in the interaction.
2. Computer initiated interfaces: In the computer initiated interfaces the computer guides the progress of the user/computer dialogue. Information is displayed and the user response of the computer takes action or displays further inform

User-Initiated Interfaces

User initiated interfaces fall into tow approximate classes:

1. Command driven interfaces: In this type of interface the user inputs commands or queries which are interpreted by the computer.
2. Forms oriented interface: The user calls up an image of the form to his/her screen and fills in the form. The forms oriented interface is chosen because it is the best choice.

Computer-Initiated Interfaces

The following computer – initiated interfaces were used:

1. The menu system for the user is presented with a list of alternatives and the user chooses one of alternatives.

2. Questions – answer type dialog system where the computer asks question and takes action based on the basis of the users reply right from the start the system is going to be menu driven, by selecting an option menu. Choosing one option starts the application. In this way every option leads the users with different results.

Error Message Design

The design of error messages is an important part of the user interface design. As user is bound to commit some errors or other while designing a system the system should be designed to be helpful by providing the user with information regarding the error he/she has committed. This application must be able to produce output at different modules for different inputs.

2.2 Performance Requirements

Performance is measured in terms of the output provided by the application. Requirement specification plays an important part in the analysis of a system. Only when the requirement specifications are properly given, it is possible to design a system, which will fit into required environment.

It rests largely in the part of the users of the existing system to give the requirement specifications because they are the people who finally use the system. This is because the requirements have to be known during the initial stages so that the system can be designed according to those requirements. It is very difficult to change the system once it has been designed and on the other hand designing a system, which does not cater to the requirements of the user, is of no use.

The requirement specification for any system can be broadly stated as given below:

- The system should be accurate.
- The system should be better than the existing system.
- The system should optimize the response time.
- The system should provide better results.

2.3 Analysis Model

The model that is basically being followed is the software development life cycle model, which states that the phases are organized in a linear order. First of all the feasibility study is done. Once that part is over the requirement analysis and project

planning begins. If system exists one then modification and addition of new module is needed, analysis of present system can be used as basic model.

The design starts after the requirement analysis is complete and the coding begins after the design is complete. Once the programming is completed, the testing is done. In this model the sequence of activities performed in a software development project are: -

1. Project Planning
2. Requirements Definition
3. Design
4. Development
5. Integration & Test
6. Installation & Acceptance

The relationship of each stage to the others can be roughly described as a Waterfall, where the outputs from a specific stage serve as the initial inputs for the following stage.

2.3.1 Problem Definition

To develop an attractive website as per the user requirement to the user to create and login into website or site.

2.3.2 Modules Involved

MODULES:

1. Login System: This keeps track of all users. And that track the users what they doing and what they want.

2. Signup System: This keeps track of all new user's data. This provides the user to create account to access the website or system.

Modules Types:

1. Login Module

2. Signup Module

3. OTP verification Module

Login Module:

The Login Module is a portal module that allows users to type a user name and password to log in. You can add this module on any module tab to allow users to log in to the system. More on creating module tabs If you allow users to create accounts and turn on Portal Direct Entry, a Create Account link appears in the Login Module.

Signup Module:

The Signup Module with the Signup module, you can quickly and easily **create a signup sheet for your brand** that users can fill out on your View. You will then be able to download the user's information in Content & Apps.

OTP Verification Module:

Email Verification / SMS Verification / OTP Verification module verifies Email Address/Mobile Number of users by sending verification code (OTP) during registration. It removes the possibility of a user registering with a fake Email Address or a fake Mobile Number.

2.4 Analyzing the Solution

Performance is measured in terms of support for a wide range of databases. number of users can concurrently access the system, because the database is centralized the document is prepared keeping in view of the academic constructs masters degree from university as partial fulfillment of my academic purpose the document specifies the general procedure that that has been followed by me, while the system was studied and developed.

The general document was provided by the industry as a reference guide to understand my responsibilities in developing the system, with respect to the requirements that have been pin pointed to get the exact structure of the system as stated by the actual client. The collected information was organized to form the specification document and then was modeled to suite the standards of the system as intended.

2.4.1 Feasibility Study

The feasibility of the project is analyzed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates.

During system analysis the feasibility study of the proposed system is to be carried out. This is to ensure that the proposed system is not a burden to the company. For feasibility analysis, some understanding of the major requirements for the system is essential.

Three key considerations involved in the feasibility analysis are

- Economical feasibility
- Technical feasibility
- Social feasibility

Economical Feasibility

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that the company can pour into the research and development of the system is limited. The expenditures must be justified.

Thus the developed system as well within the budget and this was achieved because most of the technologies used are freely available. Only the customized products had to be purchased.

Technical Feasibility

This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands on the available technical resources.

For this feasibility study, we studied complete functionality to be provided in the system, as described in the System Requirement Specification(SRA), and checked if everything was possible using different type of frontend and backend platformst.

Social Feasibility

The aspect of study is to check the level of acceptance of the system by the user. This includes the process of training the user to use the system efficiently. The user must not feel threatened by the system, instead must accept it as a necessity.

The level of acceptance by the users solely depends on the methods that are employed to educate the user about the system and to make him familiar with it.

The level of confidence must be raised so that it also able to make some constructive criticism, which is welcomed, as he is the final user of the system.

2.4.2 Requirement Specification

Requirement Specification plays an important role to create quality software solution; Requirements are refined and analyzed to assess the clarity.

Requirements are represented in a manner that ultimately leads to successful software implementation. Each requirement must be consistent with the overall objective. The development of this project deals with the following requirements:

→Hardware Requirements

→Software Requirements

Hardware Requirements

The selection of hardware is very important in the existence and proper working of any software. In the selection of hardware, the size and the capacity requirements are also important.

Processor	: Intel I3
Hard Disk	: 250 GB or above
Monitor	: 15 VGA Colour.
Mouse	: Logitech.
Ram	: 4 GB or above

Software Requirements

The software requirements specification is produces at the culmination of the analysis tasks. One of the most difficult tasks is that, the selection of the software, once system requirement is known by determining whether a particular software package fits the requirements.

Operating System	: Windows
Front End	: PHP,HTML,CSS
Script	: PHP,HTML
Data Base	: MYSQL

2.5 Selected Technologies

2.5.1 PHP: (Hypertext Preprocessor)

Hypertext Preprocessor (or simply PHP) is a general-purpose programming language originally designed for web development. It was originally created by Rasmus Lerdorf in 1994; the PHP reference implementation is now produced by The PHP Group.

php programing language

PHP started out as a small open source project that evolved as more and more people found out how useful it was. Rasmus Lerdorf unleashed the first version of PHP way back in 1994.

- PHP is a recursive acronym for "PHP: Hypertext Preprocessor".
- PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites.
- It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server.
- PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side. The MySQL server, once started, executes even very complex queries with huge result sets in record-setting time.
- PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time.
- PHP is forgiving: PHP language tries to be as forgiving as possible.
- PHP Syntax is C-Like.

Common uses of PHP:

- PHP performs system functions, i.e. from files on a system it can create, open, read, write, and close them.
- PHP can handle forms, i.e. gather data from files, save data to a file, through email you can send data, return data to the user.

- You add, delete, modify elements within your database through PHP.
- Access cookies variables and set cookies.
- Using PHP, you can restrict users to access some pages of your website.
- It can encrypt data.

Characteristics of PHP:

Five important characteristics make PHP's practical nature possible –

- Simplicity
- Efficiency
- Security
- Flexibility
- Familiarity

PHP Platform:

PHP is a general-purpose scripting language that is especially suited to server-side web development, in which case PHP generally runs on a web server. Any PHP code in a requested file is executed by the PHP runtime, usually to create dynamic web page content or dynamic images used on websites or elsewhere.

What can do PHP Language:

Anything. PHP is mainly focused on server-side scripting, so you can do anything any other CGI program can do, such as collect form data, generate dynamic page content, or send and receive cookies. But PHP can do much more.

There are three main areas where PHP scripts are used.

Server-side scripting. This is the most traditional and main target field for PHP. You need three things to make this work: the PHP parser (CGI or server module), a web server and a web browser. You need to run the web server, with a connected PHP installation. You can access the PHP program output with a web browser, viewing the PHP page through the server. All these can run on your home machine if you are just experimenting with PHP programming. See the [installation instructions](#) section for more information.

Command line scripting. You can make a PHP script to run it without any server or browser. You only need the PHP parser to use it this way. This type of usage is ideal for scripts regularly executed using cron (on *nix or Linux) or Task Scheduler (on Windows). These scripts can also be used for simple text processing tasks. See the section about Command line usage of PHP for more information.

Writing desktop applications. PHP is probably not the very best language to create a desktop application with a graphical user interface, but if you know PHP very well, and would like to use some advanced PHP features in your client-side applications you can also use PHP-GTK to write such programs. You also have the ability to write cross-platform applications this way. PHP-GTK is an extension to PHP, not available in the main distribution. If you are interested in PHP-GTK, visit » its own website.

Advantages of PHP

- 2, PHP is open source.
- Free. There are no costs associated with using PHP, including updates. Keeping costs down is a goal of any business and developers as well.
- Integration. PHP is used for so many web applications and actually powers over 30% of the web. Systems such as MongoDB, Memcache, and Pusher all integrate with PHP.
- Frameworks. Almost every benefit of PHP seems to go back to the fact that the community is so large. ...
- Easier to fix problems. When it comes to web application development, you're bound to run into issues and come across the occasional ?fail?.
- Freedom

Speed

Since PHP does not use a lot of a system's resources in order to run, it operates much faster than other scripting languages. Hosting PHP is also very easy and lot of hosts provide support for PHP. Even when used with other software, PHP still retains speed without slowing down other processes. Being that PHP is a mature language, it is also fairly stable because all the kinks have been worked out over the years.

Scalability

In the world of IT, the word scalability is like gold. Whether you're dealing with databases, hosting, or in this case, programming, scalability is never a bad thing. Due

to the way PHP is built, you can easily increase your cluster size by adding more servers as your projects grow.

HTML (Hyper Text Markup Language):

The Hyper Text Markup Language, or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of

- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

HTML dominates web application development when it comes to designing a user interface. It epitomizes the UI aspect, starting from the grassroots level to providing the advanced level APIs for a modern web application. It's a mark-up language, which works suitably well with JavaScript and CSS to provide UI rich look and dynamic behavior. Browser doesn't display the tags directly but uses them to decipher the content of the web page.

HTML is a tag-based language used to development of web pages; HTML stands for Hyper Text Markup Language. Hypertext refers to the way in which Web pages are linked together. Thus, the link available on a webpage is called Hypertext. It is a markup language which is tags tell the browser how the page will be rendered on it. Berners-Lee developed it in late 1991, but "HTML2.0" was the first standard specification published in 1995. Later, its many HTML versions came like HTML 4.0; currently, the latest version of it is HTML5.0 which is very famous in front end websites

development.



Use of HTML

Web pages development. HTML is heavily used for creating pages that are displayed on the world wide web. ...

1. Web document Creation. Document creation on the internet is dominated by HTML and its basic concept via tag and DOM i.e. ...
2. Internet navigation. ...
3. Cutting edge feature. ...
4. Responsive images on web pages. ...
5. Client-side storage. ...
6. Offline capabilities usage.
7. Data entry support with HTML
8. Game development usage
9. Native APIs usage to enrich a website

CSS(Cascading Style Sheet):

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is a

cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility. Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML.^[1] CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

CSS is designed to enable the separation of presentation and content, including layout, colours, and fonts. This separation can improve content accessibility; provide more flexibility and control in the specification of presentation characteristics; enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, which reduces complexity and repetition in the structural content; and enable the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

Separation of formatting and content also makes it feasible to present the same markup page in different styles for different rendering methods, such as on-screen, in print, by voice (via speech-based browser or screen reader), and on Braille-based tactile devices. CSS also has rules for alternate formatting if the content is accessed on a mobile device.

The name cascading comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

The CSS specifications are maintained by the World Wide Web Consortium (W3C). Internet media type (MIME type) `text/css` is registered for use with CSS by RFC 2318 (March 1998). The W3C operates a free CSS validation service for CSS documents.

Uses:

CSS CSS is used along with HTML and JavaScript in most websites to user interfaces for web applications and user interfaces for many mobile applications. You can add new looks to your old HTML documents. You can completely change the look of your website with only a few changes in CSS code.

Solves big problems:

Before CSS, tags like font, colour, background style, element alignments, border and size had to be repeated on every web page. This was a very long process. For example: If you are developing a large website where fonts and colour information are added on every single page, it will become a long and expensive process. CSS was created to solve this problem. It was a W3C recommendation

Saves a lot of time:

CSS style definitions are saved in external CSS files so it is possible to change the entire website by changing just one file.

Provide more attributes:

CSS provides more detailed attributes than plain HTML to define the look and feel of the website.

Advantages of CSS:

- CSS saves time – You can write CSS once and then reuse same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.
- Pages load faster – If you are using CSS, you do not need to write HTML tag attributes every time. Just write one CSS rule of a tag and apply it to all the occurrences of that tag. So less code means faster download times.
- Easy maintenance – To make a global change, simply change the style, and all elements in all the web pages will be updated automatically.
- Superior styles to HTML – CSS has a much wider array of attributes than HTML, so you can give a far better look to your HTML page in comparison to HTML attributes.
- Multiple Device Compatibility – Style sheets allow content to be optimized for more than one type of device. By using the same HTML document, different versions of a website can be presented for handheld devices such as PDAs and cell phones or for printing.

- Global web standards – Now HTML attributes are being deprecated and it is being recommended to use CSS. So its a good idea to start using CSS in all the HTML pages to make them compatible to future browsers.
- 1 . The universal selectors: Rather than selecting elements of a specific type, the universal selector quite simply matches the name of any element type .
 - 2 . The element selector: The element selector selects elements based on the element name. You can select all p elements on a page like this (in this case, all p elements will be center-aligned, with a red text color)
 - 3 . The descendant selector: Suppose you want to apply a style rule to a particular element only when it lies inside a particular element. As given in the following example, the style rule will apply to the em element only when it lies inside the ul tag.
 - 4 . The id selector :
 - The id selector uses the id attribute of an HTML element to select a specific element.
 - The id of an element should be unique within a page, so the id selector is used to select one unique element!
 - To select an element with a specific id, write a hash (#) character, followed by the id of the element.
 - The style rule below will be applied to the HTML element with id="para1":
 5. The class selectors :
 - The class selector selects elements with a specific class attribute.
 - To select elements with a specific class, write a period (.) character, followed by the name of the class.
 - In the example below, all HTML elements with class="center" will be red and center-aligned:

MY SQL:

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language. A

relational database organizes data into one or more data tables in which data types may be related to each other; these relations help structure the data. SQL is a language programmers use to create...

MySQL is offered under two different editions: the open source MySQL Community Server and the proprietary Enterprise Server. MySQL Enterprise Server is differentiated by a series of proprietary extensions which install as server plugins, but otherwise shares the version numbering system and is built from the same code base. Major features as available in MySQL 5.6: A graphical user interface (GUI) is a type of interface that allows users to interact with electronic devices or programs through graphical icons and visual indicators such as secondary notation, as opposed to text-based interfaces,

CHAPTER - 3

SYSTEM DESIGN

3.1 Input Design

The input design is the link between the information system and the user. It comprises the developing specification and procedures for data preparation and those steps are necessary to put transaction data in to a usable form for processing can be achieved by inspecting the computer to read data from a written or printed document or it can occur by having people keying the data directly into the system. The design of input focuses on controlling the amount of input required, controlling the errors, avoiding delay, avoiding extra steps and keeping the process simple. The input is designed in such a way so that it provides security and ease of use with retaining the privacy. Input

Design considered the following things:

- What data should be given as input?
- How the data should be arranged or coded?
- The dialog to guide the operating personnel in providing input.
- Methods for preparing input validations and steps to follow when error occur.

OBJECTIVES

1. Input Design is the process of converting a user-oriented description of the input into a computer-based system. This design is important to avoid errors in the data input process and show the correct direction to the management for getting correct information from the computerized system.
2. It is achieved by creating user-friendly screens for the data entry to handle large volume of data. The goal of designing input is to make data entry easier and to be free from errors. The data entry screen is designed in such a way that all the data manipulates can be performed. It also provides record viewing facilities.
3. When the data is entered it will check for its validity. Data can be entered with the help of screens. Appropriate messages are provided as when needed

so that the user will not be in maize of instant. Thus the objective of input design is to create an input layout that is easy to follow.

3.2 Output Design

A quality output is one, which meets the requirements of the end user and presents the information. In any system results of processing are communicated to the users and to other system through outputs. In output design it is determined how the information is to be displaced for immediate need and also the hard copy output. It is the most important and direct source information to the user. Efficient and intelligent output design improves the system's relationship to help user decision-making.

1. Designing computer output should proceed in an organized, well thought out manner; the right output must be developed while ensuring that each output element is designed so that people will find the system can use easily and effectively. When analysis design computer output, they should Identify the specific output that is needed to meet the requirements.
2. Select methods for presenting information.
3. Create document, report, or other formats that contain information produced by the system.

The output form of an information system should accomplish one or more of the following objectives.

- ❖ Convey information about past activities, current status or projections of the
- ❖ Future.
- ❖ Signal important events, opportunities, problems, or warnings.
- ❖ Trigger an action.
- ❖ Confirm an action.

Output Definition

The outputs should be defined in terms of the following points:

- Type of the output
- Location of the output
- Frequency of the output

Output Media

In the next stage it is to be decided that which medium is the most appropriate for the output. The main considerations when deciding about the output media are:

- The suitability for the device to the particular application.
- The need for a hard copy.
- The response time required.
- The software and hardware available and cost.

3.3 UML Design

UML Diagrams:

UML stands for Unified Modeling Language. UML is a standardized general-purpose modeling language in the field of object-oriented software engineering. The standard is managed, and was created by, the Object Management Group.

UML is a notation that resulted from the unification of Object Modeling Technique and Object Oriented Software Technology. Uml has been designed for broad range application. Hence, it provides constructs for a broad range of systems and activities.

The goal is for UML to become a common language for creating models of object oriented computer software. In its current form UML is comprised of two major components: a Meta-model and a notation. In the future, some form of method or process may also be added to; or associated with, UML.

The Unified Modeling Language is a standard language for specifying, Visualization, Constructing and documenting the artifacts of software system, as well as for business modeling and other non-software systems.

The UML represents a collection of best engineering practices that have proven successful in the modeling of large and complex systems.

The UML is a very important part of developing objects oriented software and the software development process. The UML uses mostly graphical notations to express the design of software projects.

GOALS:

The Primary goals in the design of the UML are as follows:

1. Provide users a ready-to-use, expressive visual modeling Language so that they can develop and exchange meaningful models.
2. Provide extendibility and specialization mechanisms to extend the core concepts.
3. Be independent of particular programming languages and development process.
4. Provide a formal basis for understanding the modeling language.
5. Encourage the growth of OO tools market.
6. Support higher level development concepts such as collaborations, frameworks, patterns and components.
7. Integrate best practices.

An overview of UML in five notations

Class Diagrams:

Class diagram to describe the structure of the system .Classes are abstraction that specify the common structure and behavior of a set class diagram describe the system in terms of objects, classes, attribute, operations and their association.

Use case Diagram:

Use cases are used during requirement elicitation and analysis. To represent the functionality of the system .Use cases focus on the behavior of the system from external point view. The actor is outside the boundary of the system, whereas the use cases are inside the boundary of the system.

Sequence Diagram:

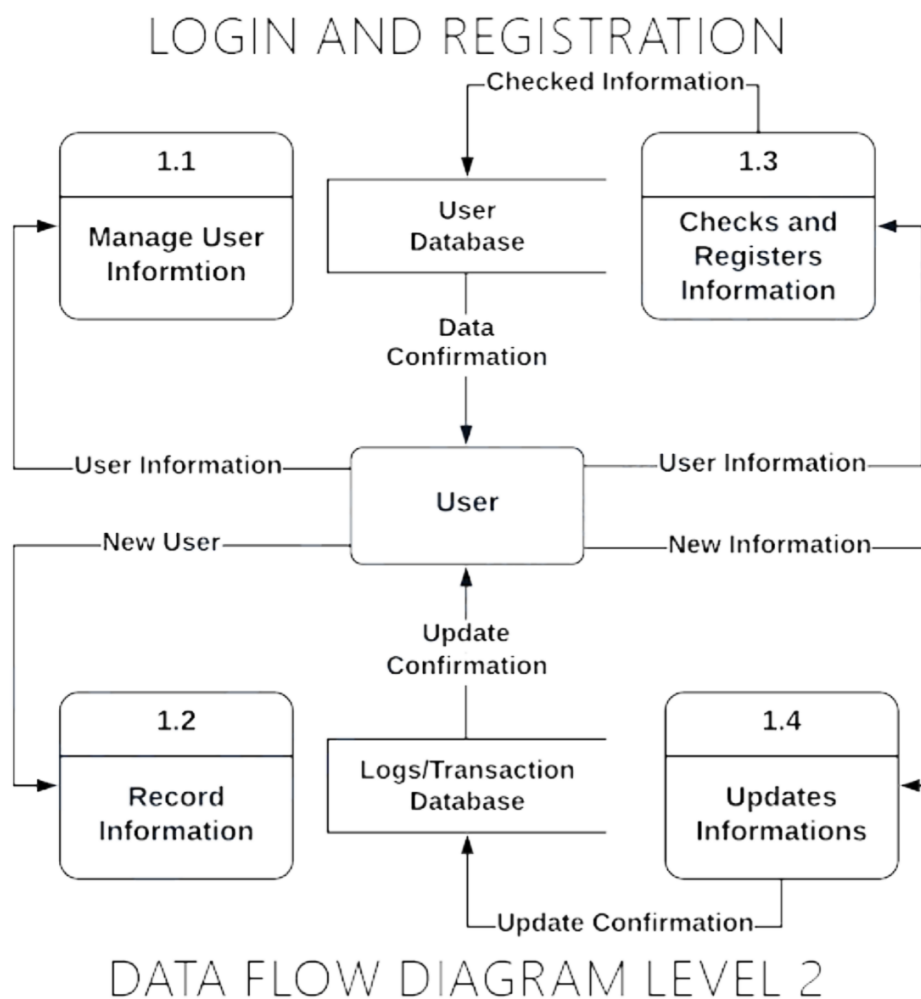
Sequence diagram are used to formalize the behavior of the system and to visualize the communication among objects. They are useful for identifying additional objects that participate in the use cases. A sequence diagram represents the interaction that take place among these objects.

State chart Diagram:

State Chart diagram describe the behavior of an individual object as a number of states and transmissions between these states .A state represent a particular set of values for an objects, the state chart diagram focuses on the transition between states.

Use case diagram:

A Use case diagram is the Unified modeling Language is a type of behavior diagram defined by and created from a use-case analysis. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals and any dependencies between those use cases. The main purpose of a use case diagram is to show what system function is preferred for which actor .Roles of the actors in the system can be depicted.



Sequence Diagram:

A sequence diagram in unified modeling language (uml) is a kind of interaction diagram that shows how processes operate with one another and in what order. It is a construct of a message sequence chart. Sequence diagrams are sometimes called event diagrams or event scenarios or timing diagrams.

Sequence diagrams belong to a group of UML diagrams called interaction diagrams. Sequence diagrams describe how objects interact over the course of time through an exchange of messages. A single sequence diagram often represents the flow of events for a single use case

Instance:

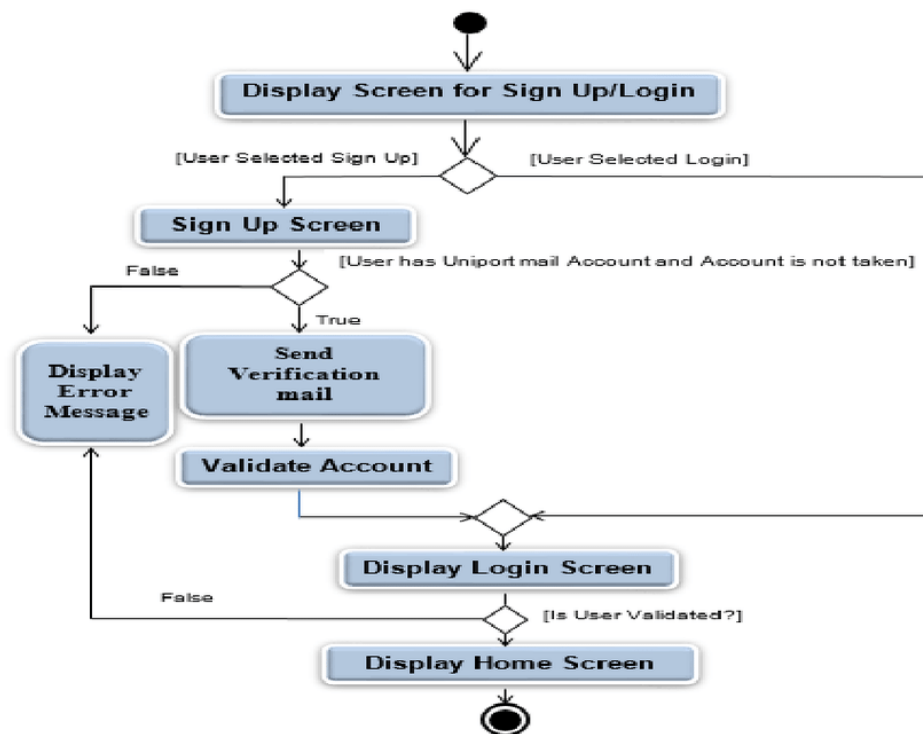
An instance of a class shows a sample configuration of an object. On the sequence diagram, each instance has a lifeline box underneath it showing it's existence over a period of time.

Actor: An actor is anything outside the system that interacts with the system. It could be a user be a user or another system.

Message: The message indicates communication between objects. The order of messages from top to bottom on the diagram should be the order in which the message occur.

Activity Diagram: An activity diagram in unified modeling language (uml) shows how processes operate with one activity to another activity

Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency. In the Unified Modeling Language, activity diagrams can be used to describe the business and operational step-by-step workflows of components in a system. An activity diagram shows the overall flow of control.



ACTIVITY DIAGRAM

CHAPTER – 4

IMPLEMENTATION

Sample code:

1.CONNECTION:

```
<?php  
$con = mysqli_connect('localhost', 'root', '', 'userform');  
?>
```

2.ControllerUserData:

```
<?php  
session_start();  
require "connection.php";  
$email = "";  
$name = "";  
$errors = array();  
  
//if user signup button  
if(isset($_POST['signup']))  
{  
    $name = mysqli_real_escape_string($con, $_POST['name']);  
    $email = mysqli_real_escape_string($con, $_POST['email']);  
    $password = mysqli_real_escape_string($con, $_POST['password']);  
    $cpassword = mysqli_real_escape_string($con, $_POST['cpassword']);  
    if($password != $cpassword){  
        $errors['password'] = "Confirm password not matched!";  
    }  
    $email_check = "SELECT * FROM usertable WHERE email = '$email'";  
    $res = mysqli_query($con, $email_check);  
    if(mysqli_num_rows($res) > 0){  
        $errors['email'] = "Email that you have entered is already exist!";  
    }  
}
```

```

if(count($errors) === 0){
    $encpass = password_hash($password, PASSWORD_BCRYPT);
    $code = rand(999999, 111111);
    $status = "notverified";
    $insert_data = "INSERT INTO usertable (name, email, password, code, status)
                    values('$name', '$email', '$encpass', '$code', '$status)";
    $data_check = mysqli_query($con, $insert_data);
    if($data_check){
        $subject = "Verify your Email IIET(Diploma Batch-7)";
        $message = "Your verification code to verify your Email is $code";
        $sender = "";
        if(mail($email, $subject, $message, $sender)){
            $info = "We've sent a verification code to your email - $email";
            $_SESSION['info'] = $info;
            $_SESSION['email'] = $email;
            $_SESSION['password'] = $password;
            header('location: user-otp.php');
            exit();
        }else{
            $errors['otp-error'] = "Failed while sending code!";
        }
    }else{
        $errors['db-error'] = "Failed while inserting data into database!";
    }
}

//if user click verification code submit button
if(isset($_POST['check'])){
    $_SESSION['info'] = "";

```

```

$otp_code = mysqli_real_escape_string($con, $_POST['otp']);
$check_code = "SELECT * FROM usertable WHERE code = $otp_code";
$code_res = mysqli_query($con, $check_code);
if(mysqli_num_rows($code_res) > 0){
    $fetch_data = mysqli_fetch_assoc($code_res);
    $fetch_code = $fetch_data['code'];
    $email = $fetch_data['email'];
    $code = 0;
    $status = 'verified';
    $update_otp = "UPDATE usertable SET code = $code, status = '$status'
WHERE code = $fetch_code";
    $update_res = mysqli_query($con, $update_otp);
    if($update_res){
        $_SESSION['name'] = $name;
        $_SESSION['email'] = $email;
        header('location: home.php');
        exit();
    }else{
        $errors['otp-error'] = "Failed while updating code!";
    }
}else{
    $errors['otp-error'] = "You've entered incorrect code!";
}
}

//if user click login button
if(isset($_POST['login'])){
    $email = mysqli_real_escape_string($con, $_POST['email']);
    $password = mysqli_real_escape_string($con, $_POST['password']);
    $check_email = "SELECT * FROM usertable WHERE email = '$email'";
    $res = mysqli_query($con, $check_email);

```

```

if(mysqli_num_rows($res) > 0){
    $fetch = mysqli_fetch_assoc($res);
    $fetch_pass = $fetch['password'];
    if(password_verify($password, $fetch_pass)){
        $_SESSION['email'] = $email;
        $status = $fetch['status'];
        if($status == 'verified'){
            $_SESSION['email'] = $email;
            $_SESSION['password'] = $password;
            header('location: home.php');
        }else{
            $info = "It's look like you haven't still verify your email - $email";
            $_SESSION['info'] = $info;
            header('location: user-otp.php');
        }
    }else{
        $errors['email'] = "Incorrect email or password!";
    }
}else{
    $errors['email'] = "It's look like you're not yet a member! Click on the bottom
link to signup.";
}
}

```

//if user click continue button in forgot password form

```

if(isset($_POST['check-email'])){
    $email = mysqli_real_escape_string($con, $_POST['email']);
    $check_email = "SELECT * FROM usertable WHERE email='$email'";
    $run_sql = mysqli_query($con, $check_email);
    if(mysqli_num_rows($run_sql) > 0){
        $code = rand(999999, 111111);
    }
}

```



```

    $fetch_data = mysqli_fetch_assoc($code_res);
    $email = $fetch_data['email'];
    $_SESSION['email'] = $email;

    $info = "Please create a new password that you don't use on any other site.";
    $_SESSION['info'] = $info;
    header('location: new-password.php');
    exit();
}
else{
    $errors['otp-error'] = "You've entered incorrect code!";
}
}

//if user click change password button
if(isset($_POST['change-password'])){
    $_SESSION['info'] = "";
    $password = mysqli_real_escape_string($con, $_POST['password']);
    $cpassword = mysqli_real_escape_string($con, $_POST['cpassword']);
    if($password !== $cpassword){
        $errors['password'] = "Confirm password not matched!";
    }
    else{
        $code = 0;
        $email = $_SESSION['email']; //getting this email using session
        $encpass = password_hash($password, PASSWORD_BCRYPT);
        $update_pass = "UPDATE usertable SET code = $code, password = '$encpass'
WHERE email = '$email'";
        $run_query = mysqli_query($con, $update_pass);
        if($run_query){
            $info = "Your password changed. Now you can login with your new
password.";
            $_SESSION['info'] = $info;
            header('Location: password-changed.php');

```

```

    }else{
        $errors['db-error'] = "Failed to change your password!";
    }
}

}

}

//if login now button click
if(isset($_POST['login-now'])){
    header('Location: login-user.php');
}

?>

<div class="row">
    <div class="col-md-4 offset-md-4 form">
        <form action="forgot-password.php" method="POST" autocomplete="">
            <h2 class="text-center">Forgot Password</h2>

```

CHAPTER - 5

SYSTEM TESTING

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault in a work product. It provides a way to check the functionality of components, sub assemblies, assemblies and/or a finished product. It is the process of exercising software with the intent of ensuring that the software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement.

5.1 Types of Tests

5.1.1 Unit Testing

Unit testing involves the design of test cases that validate that the internal program logic is functioning properly, and that program inputs produce valid outputs. All decision branches and internal code flow should be validated. It is the testing of individual software units of the application .it is done after the completion of an individual unit before integration. This is a structural testing, that relies on knowledge of its construction and is invasive. Unit tests perform basic tests at component level and test a specific business process, application, and/or system configuration. Unit tests ensure that each unique path of a business process performs accurately to the documented specifications and contains clearly defined inputs and expected results.

5.1.2 Integration Testing

Integration tests are designed to test integrated software components to determine if they actually run as one program. Testing is event driven and is more concerned with the basic outcome of screens or fields. Integration tests demonstrate that although the components were individually satisfaction, as shown by successfully unit testing, the combination of components is correct and consistent. Integration testing is specifically aimed at exposing the problems that arise from the combination of components.

5.1.3 Functional testing

Functional tests provide systematic demonstrations that functions tested are available as specified by the business and technical requirements, system documentation, and user manuals.

Functional testing is centered on the following items:

- Valid Input : Identified classes of valid input must be accepted.
- Invalid Input : Identified classes of invalid input must be rejected.
- Functions : Identified functions must be exercised.
- Output : Identified classes of application outputs must be exercised.
- Systems/Procedures : Interfacing systems or procedures must be invoked.

Organization and preparation of functional tests is focused on requirements, key functions, or special test cases. In addition, systematic coverage pertaining to identify Business process flows; data fields, predefined processes, and successive processes must be considered for testing. Before functional testing is complete, additional tests are identified and the effective value of current tests is determined.

5.1.4 System Testing

System testing ensures that the entire integrated software system meets requirements. It tests a configuration to ensure known and predictable results. An example of system testing is the configuration oriented system integration test. System testing is based on process descriptions and flows, emphasizing pre-driven process links and integration points.

White Box Testing

White Box Testing is a testing in which in which the software tester has knowledge of the inner workings, structure and language of the software, or at least its purpose. It is purpose. It is used to test areas that cannot be reached from a black box level.

Black Box Testing

Black Box Testing is testing the software without any knowledge of the inner workings, structure or language of the module being tested. Black box tests, as most other kinds of tests, must be written from a definitive source document, such as

specification or requirements document, such as specification or requirements document. It is a testing in which the software under test is treated, as a black box. It cannot “see” into it. The test provides inputs and responds to outputs without considering how the software works.

5.2 Test strategy and approach

Field testing will be performed manually and functional tests will be written in detail.

5.2.1 Test objectives

- All field entries must work properly.
- Pages must be activated from the identified link.
- The entry screen, messages and responses must not be delayed.

5.2.2 Features to be tested

- Verify that the entries are of the correct format
- No duplicate entries should be allowed
- All links should take the user to the correct page.

5.2.2.1 Integration Testing

Software integration testing is the incremental integration testing of two or more integrated software components on a single platform to produce failures caused by interface defects. The task of the integration test is to check that components or software applications, e.g. components in a software system or one step up software applications at the company level interact without error.

Test Results: All the test cases mentioned above passed successfully. No defects encountered.

5.2.2.2 Acceptance Testing

User Acceptance Testing is a critical phase of any project and requires significant participation by the end user. It also ensures that the system meets the functional requirements.

Test Results: All the test cases mentioned above passed successfully. No defects encountered.

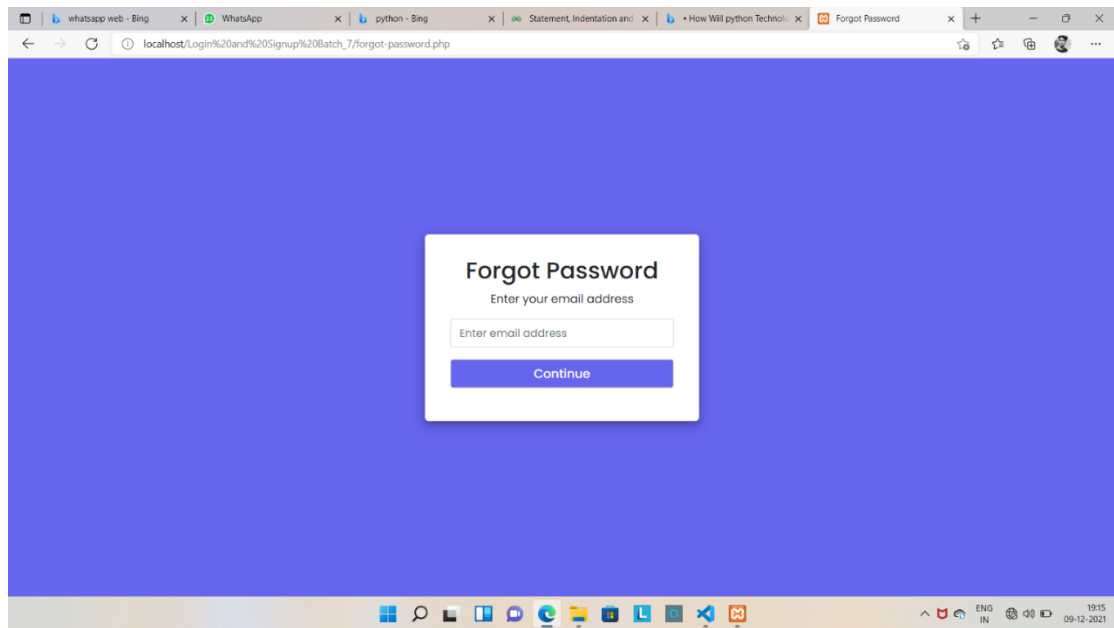
5.3 Sample Screens

The screenshot shows a web browser window with the URL `localhost/Login%20and%20Signup%20Batch_7/login-user.php`. The page has a solid blue background. In the center, there is a white rectangular box containing the login form. The form is titled "Login Form" and "Indur Institute of Engineering and Technology". Below the title, it says "Login with your email and password." There are two input fields: "Email Address" and "Password". Below the "Password" field, there is a link "Forgot password?". At the bottom of the form is a blue "Login" button. Below the button, it says "Not yet a member? [Signup Now](#)".

Fill the empty fields with required details of account name and password

The screenshot shows a web browser window with the URL `localhost/Login%20and%20Signup%20Batch_7/signup-user.php`. The page has a solid blue background. In the center, there is a white rectangular box containing the signup form. The form is titled "Signup Form" and "Indur Institute of Engineering and Technology". Below the title, it says "It's quick and easy." There are four input fields: "Full Name", "Email Address", "Password", and "Confirm password". At the bottom of the form is a blue "Signup" button. Below the button, it says "Already a member? [Login here](#)".

Fill the required details to create an account



This is forgot password



Welcome ajay



Welcome page

CHAPTER -6

CONCLUSION

It has great pleasure for me to work on this exciting and challenging project. This project proved good for me as it provided practical knowledge of Login & Signup System. This will provide user to access the website or system using already existing account or by creating new account. This project provides user to create an account or logging into existing account to access website or system to enter into specific page / webpage / Application. This will provide better opportunities and guidance in future developing projects independently.

CHAPTER -7

REFERENCES

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